

WHAT IS CLAIMED IS:

1. A method of driving a plasma display panel comprised of (A) a first substrate including at least one first electrode, and at least one second electrode
5 extending in parallel with said first electrode and defining a display area with said first electrode therebetween, and (B) a second substrate including at least one third electrode facing said first and second electrodes and extending perpendicularly to said first and second electrodes, wherein a display cell is arranged at each of intersections of said first and second electrodes with said
10 third electrode,

said method including:

(a) applying a serrate voltage having an inclined waveform in which a voltage varies with the lapse of time, to at least one of said first and second electrodes; and
15 (b) applying a preliminary charge-eliminating pulse voltage to at least one of said first and second electrodes after said a charge-eliminating discharge has been generated due to said serrate voltage, wherein said preliminary charge-eliminating pulse voltage eliminates electric charges only when electric charges have not been sufficiently eliminated.

20

2. The method as set forth in claim 1, wherein said preliminary charge-eliminating pulse voltage carries out narrow-width charge-elimination.

3. The method as set forth in claim 2, wherein said preliminary
25 charge-eliminating pulse voltage has a pulse width in the range of 0.5 to 2 microseconds both inclusive.

4. The method as set forth in claim 1, wherein a negative preliminary charge-eliminating pulse voltage is applied to said second electrode.

5. The method as set forth in claim 1, wherein a positive preliminary charge-eliminating pulse voltage is applied to said first electrode.

5 6. The method as set forth in claim 1, wherein negative and positive preliminary charge-eliminating pulse voltages are concurrently applied to said second and first electrodes, respectively.

10 7. The method as set forth in claim 1, further including (c) applying a preliminary pre-eliminating adjusting pulse voltage to at least one of said first and second electrodes to cause generate discharge in a display cell in which electric charges have not been sufficiently eliminated, said step (c) being carried out between said steps (a) and (b).

15 8. The method as set forth in claim 7, wherein said preliminary pre-eliminating adjusting pulse voltage is applied to an electrode other than an electrode to which said preliminary charge-eliminating pulse voltage is applied.

20 9. The method as set forth in claim 7, wherein said preliminary pre-eliminating adjusting pulse voltage has a pulse width greater than a pulse width of said preliminary charge-eliminating pulse voltage.

25 10. The method as set forth in claim 7, wherein said preliminary pre-eliminating adjusting pulse voltage is applied a plurality of times to at least one of said first and second electrodes in said step (c).

11. The method as set forth in claim 7, wherein said preliminary pre-eliminating adjusting pulse voltage has a pulse width in the range of 2 to 10 microseconds both inclusive.

12. The method as set forth in claim 7, wherein said preliminary pre-eliminating adjusting pulse voltage is applied to at least one of said first and second electrodes immediately before application of said preliminary charge-eliminating pulse voltage.

13. The method as set forth in claim 7, wherein said preliminary pre-eliminating adjusting pulse voltage has the same polarity as that of said preliminary charge-eliminating pulse voltage.

14. The method as set forth in claim 1, wherein said preliminary charge-eliminating pulse voltage carries out thick-width charge-elimination.

15. The method as set forth in claim 14, wherein said preliminary charge-eliminating pulse voltage has a pulse width in the range of 2 to 50 microseconds both inclusive.

16. The method as set forth in claim 1, wherein said preliminary charge-eliminating pulse voltage is comprised of a self-eliminating pulse voltage.

17. The method as set forth in claim 16, wherein a preliminary pre-eliminating adjusting pulse voltage is applied to an electrode other than an electrode to which said self-eliminating pulse voltage is applied such that said preliminary pre-eliminating adjusting pulse voltage temporally overlaps said self-eliminating pulse voltage, to generate discharge in a display cell in which electric charges have not been sufficiently eliminated.

18. The method as set forth in claim 16, wherein said self-eliminating pulse voltage has a pulse width in the range of 2 to 50 microseconds both inclusive.

19. The method as set forth in claim 16, wherein said preliminary charge-eliminating pulse voltage is applied to at least one of said first and second electrodes as a part of a pulse voltage applied in a scanning period.

5

20. The method as set forth in claim 7, wherein said preliminary pre-eliminating adjusting pulse voltage generates an electric field having a polarity opposite to a polarity of an electric field generated by said preliminary charge-eliminating pulse voltage.

10

21. The method as set forth in claim 1, wherein a time at which cross-discharge is generated between said third electrode and one of said first and second electrodes is set earlier than a time at which surface-discharge is generated between said first and second electrodes.

15

22. The method as set forth in claim 21, wherein a preliminary pulse voltage is applied to said third electrode in synchronization with a timing at which application of said preliminary charge-eliminating pulse voltage starts, said preliminary pulse voltage having a polarity opposite to a polarity of said preliminary charge-eliminating pulse voltage.

20

23. The method as set forth in claim 21, wherein a preliminary pulse voltage is applied to said third electrode in synchronization with a timing at which application of said preliminary pre-eliminating adjusting pulse voltage starts, said preliminary pulse voltage having a polarity opposite to a polarity of said preliminary pre-eliminating adjusting pulse voltage.

25

24. The method as set forth in claim 22, wherein said preliminary pulse voltage is equal to a data pulse voltage.

25. The method as set forth in claim 22, wherein said preliminary pulse voltage has a pulse width in the range of 0.1 to 2 microseconds both inclusive.

5 26. The method as set forth in claim 22, wherein said preliminary pulse voltage has a pulse width equal to or smaller than a pulse width of said preliminary charge-eliminating pulse voltage.